

Jeopardy Assessment
for the Proposed Incidental Taking Authorization
of the snow trillium (*Trillium nivale*)
Nugget Lake East Grade Stabilization Structure Project
Nugget Lake County Park, Pierce County, Wisconsin

Background

The state-threatened snow trillium is a member of the genus *Trillium*. The common name of the species comes from its early spring flowering time, sometimes while there is snow on the ground. *Trillium nivale* is one of our shortest trilliums, only growing to a height of 3 to 6 inches from a short, stout rhizome. In Wisconsin, snow trilliums typically flower from late March through April. Because of their early flowering period and diminutive size, snow trilliums may be easily overlooked. The three whorled leaves are in the typical trillium arrangement. In Wisconsin, snow trilliums occur in rich, moist, calcareous southern mesic and dry-mesic forests.

Snow trillium has been found in 12 counties in Wisconsin, but is largely confined to three counties: Pierce, Brown, and Manitowoc. Snow trillium has been observed at 34 sites since 1984. Eleven populations are either older, historical records or have been extirpated. Of these sites, only 11 populations are of good to excellent estimated viability, and an additional 2 populations are ranked at fair to good. The remainder of the populations either has fair or poor estimated viability. The population at Nugget Lake County Park is one of the largest in the state.

In summary, snow trillium occurs mostly in southern dry-mesic or mesic forests with the greatest concentrations in Pierce, Brown, and Manitowoc counties. About two-thirds of the documented populations have fair to poor estimated viability. The Nugget Lake County Park site has one of the largest populations in Wisconsin.

Jeopardy Assessment

The Nugget Lake County Park snow trillium population is very large, and thousands of plants have been observed in the park. The proposed Nugget Lake County Park dam project would result in the loss of about 1.65 acres of potential snow trillium habitat as well as more than 100 snow trillium plants. Due to the topography of the county park and purpose of the dam, it is not feasible to relocate the construction site to another location within the park. Given the population size and distribution of snow trillium within the park, the limited area of the dam project is unlikely to jeopardize this population.

Conservation Measures

The following conservation measures will be adhered to for the purpose of minimizing any adverse effect on the state endangered snow trillium.

1. Delineate the dam project area with either silt fencing or orange construction fence and ensure that construction activities will be confined to within that area.
2. Construction materials shall not be placed on snow trillium plants outside of the dam project area.
3. Use education and monitoring to ensure compliance with restricted access to the project area.
4. As proposed, translocate 100 plant clusters to a designated site on Pierce County Forest land. Monitor the translocations in spring 2007, 2009, and 2011 and note survivorship and any new plants. Provide findings to the Endangered Resources botanist.
5. It is preferred that native, local ecotype shrubs be planted upon completion of the project.